Amendments to Claims

- (Currently Amended) A two stage amplifier, comprising:
- a first amplifier stage and a second amplifier stage; and
- a first component and a second component coupled in series between the first and second amplifier stages, the first component selected to provide AC decoupling of the first and second amplifier stages and the second component selected to provide for a stability of the two stage amplifier by inserting a loss in a feedback between the first and second amplifier stages.
- 2. (Previously Presented) The two stage amplifier of claim 1, wherein the first component is an inductor.
- 3. (Previously Presented) The two stage amplifier of claim 2, wherein the inductor has a value that is selected to decouple the first and second amplifier stages.
- 4. (Currently Amended) <u>A two stage amplifier</u>, comprising:
- a first amplifier stage and a second amplifier stage; and
- a first component and a second component coupled in series between the first and second amplifier stages, the first component selected to provide AC decoupling of the first and second amplifier stages and the second component selected to provide for a stability of the two stage amplifier The two stage amplifier of claim 3, wherein the first component is an inductor having a value selected to decoupled the first and second amplifier stages the value of the inductor is selected in response

to a lowest desired operating frequency of the two stage amplifier.

- 5. (Currently Amended) The two stage amplifier of <u>claim</u>
 4 <u>claim 1</u>, wherein the second component is a resistor.
- 6. (Previously Presented) The two stage amplifier of claim 5, wherein the resistor has a value that is selected to maintain the stability of the two stage amplifier.
- 7. (Previously Presented) A two stage amplifier, comprising:
- a first amplifier stage and a second amplifier stage; and
- a first component and a second component coupled in series between the first and second amplifier stages, the first component selected to provide AC decoupling of the first and second amplifier stages and the second component selected to provide for a stability of the two stage amplifier wherein the first and second amplifier stages comprise a common-source amplifier stage and a common-drain amplifier stage.
- 8. (Previously Presented) The two stage amplifier of claim 7, wherein the first component is an inductor having a value that is selected to decouple a transistor in the common-source amplifier stage from a transistor in the common-drain amplifier stage.
- 9. (Previously Presented) The two stage amplifier of claim 7, wherein the second component is a resistor arranged in series with a capacitor in a feedback circuit for the transistor in common-source amplifier stage.

- 10. (Previously Presented) The two stage amplifier of claim 9, wherein the resistor is selected to provide the stability in the two stage amplifier by causing a loss in the feedback circuit.
- 11. (Currently Amended) A method for decoupling a first amplifier stage and a second amplifier stage of a two stage amplifier, comprising:

selecting a first component to provide AC decoupling of the first and second amplifier stages;

selecting a second component to provide for a stability of the two stage amplifier by inserting a loss in a feedback between the first and second amplifier stages; and

coupling the first and second component in series between the first and second amplifier stages.

- 12. (Previously Presented) The method of claim 11, wherein selecting a first component comprises selecting an inductor.
- 13. (Previously Presented) The method of claim 12, wherein the inductor has a value that is selected to decouple the first and second amplifier stages.
- 14. (Currently Amended) A method for decoupling a first amplifier stage and a second amplifier stage of a two stage amplifier, comprising:

selecting a first component to provide AC decoupling of the first and second amplifier stages; selecting a second component to provide for a stability of the two stage amplifier; and

coupling the first and second component in series
between the first and second amplifier stages The method
of claim 13, wherein selecting a first component

comprises selecting an inductor having a value that decouples the first and second amplifier stages the value of the inductor is selected in response to a lowest desired operating frequency of the two stage amplifier.

- 15. (Currently Amended) The method of claim <u>14</u> 11, wherein selecting a second component comprises selecting a resistor.
- 16. (Previously Presented) The method of claim 15, wherein the resistor has a value that is selected to maintain the stability of the two stage amplifier.
- 17. (Previously Presented) A method for decoupling a first amplifier stage and a second amplifier stage of a two stage amplifier, comprising:

selecting a first component to provide AC decoupling of the first and second amplifier stages;

selecting a second component to provide for a stability of the two stage amplifier; and

coupling the first and second component in series between the first and second amplifier stages wherein coupling the first and second component in series between the first and second amplifier stages comprises coupling the first and second component in series between a common-source amplifier stage and a common-drain amplifier stage.

- 18. (Previously Presented) The method of claim 17, wherein the first component is an inductor having a value that is selected to decouple a transistor in the commonsource amplifier stage from a transistor in the commondrain amplifier stage.
- 19. (Previously Presented) The method of claim 17,

further comprising coupling the second component in series with a capacitor in a feedback circuit for the transistor in common-source amplifier stage.

20. (Previously Presented) The method of claim 19, wherein the second component is a resistor that is selected to provide the stability in the two stage amplifier by causing a loss in the feedback circuit.